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 TI Preparation of fused cements by the V. V. Serov conversion method
 AU Krylov, V. F.
 SO Novoe v Khim. i Tekhnol. Tsementa, Vses. Khim. Obshchestvo im. D. I. Mendeleeva, Tr. Soveshch., Moscow (1962), 1961, 149-54
 DT Journal
 LA Unavailable
 CC 22 (Cement and Concrete Products)
 AB cf. CA 32, 76937. Serov's conversion method for making a "fused" portland cement from liquid metal slag consists of blowing a hot (700-800°) fuel oil-O mixture (containing 26-8% O) into a liquid slag (1300-50°). This raises the temperature in the convertor up to 2000° and leads to an intensive mixing of the mass; facilitates the dissoln. of the solid CaO, which is added in amts. of 70-5%, based on the weight of the slag. The clinker melt has a uniform chemical and mineralogical composition and contains 60-3% CaO, as compared with 46-8% in the initial slag used. Data are tabulated on the chemical and mineralogical compns. of "fused" portland cements obtained from various slags at a semicom. pilot plant. Several kinds of high-quality alumina cements, containing various amts. of Fe oxides and in some cases TiO₂, were also obtained and data on their composition and mech. properties are tabulated. A high tensile strength and high compressive strength titania-alumina cement (SiO₂ 2.5-4, Al₂O₃ 40-45, Fe₂O₃ + FeO 3-4, CaO 38-40, and TiO₂ 5-8%) was also obtained from titania-alumina slag formed in the production of ferrotitanium. At a comparatively high Fe content, it contains practically no S; therefore it is particularly suitable for heat-resistant concrete and heat-resistant catalysts.
 IT Cement, hydraulic or structural
 (from gypsum and slag, properties of, slag composition and)
 IT Cement, hydraulic or structural
 (from slags and hot fuel oil-O mixture)
 IT 13397-24-5, Gypsum
 (cement from slag and, properties of, slag composition and)
 IT 12719-90-3P, Iron alloys, titanium-
 RL: PREP (Preparation)
 (manufacture of, slags from, cement manufacture from)
 IT 12719-90-3P, Titanium alloys, iron-
 RL: PREP (Preparation)
 (slags from, cement manufacture from)